IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Robert S. Hines, Jr.

Application No: 10/663,066

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10-2-04 Donald W. Spurrell
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Title: BAKING OVEN CONSTRUCTION

This Correspondence Express Mailed: 10-2-04

The Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Response To Office Action

Enclosed herewith is a separate "Amendments to the claims" section.

The provisional double patenting rejection of claims 1-10 under 35 U.S.C. 101 based on applicants parent Application No. 10/280,404 is believed to be obviated by the abandonment of that parent application as evidenced by the enclosed Notice of Abandonment (2 sheets) dated 08-23-04.

The 112 rejections of claims 5 and 10 are believed to be obviated by the present amendments to the claims.

The rejection of claims 1 and 7 under 35 U.S.C. 102(b) on Vegh is respectfully traversed in view of the presently submitted extensive amendments to these claims, and further for the reason that Vegh's disclosure is to a steam processor rather than to Applicant's high

temperature air (HTA) convection oven. In Vegh the prime mover for the circulation is through the pressure drop resulting from the change of state of steam to water. In Vegh there is no circulation of HTA resulting from a pressure drop due to a chimney effect as in applicant's oven, wherein the circulated and somewhat cooled air and combustion gases are vented through ductwork in the nature of a chimney from the upper portion of a convection oven to the atmosphere.

Further, Vegh's steam processor could not possibly function in the manner disclosed by applicant wherein in applicants system the only discharge to the atmosphere is of gases, i.e., warm air, water vapor (where a steam generator system is employed), and combustion gases. Vegh's steam processor discharges water condensate through a drain manifold 146 and a condensate drainpipe 147 extending from the bottom of his processor. In Vegh there is no teaching of or allusion whatsoever to a home style baking or cooking oven which operates to circulate heated air solely by the drawing effect of chimney type venting ductwork.

The rejection of claims 1-4, 8 and 10 under 35 U.S.C. 103(a) as unpatentable over Sato in view of either Vegh or Martinez is respectfully traversed. Sato does not disclose a convection oven using HTA, but rather a steam cooker such as in Vegh. There is no structure in Sato which can use the chimney effect to provide a circular path for HTA throughout a cooking or baking cavity. Also, is no teaching in Sato of placing a vent for circulated heated air in a lower section of his steamer housing and, to the contrary, his gas outlet is in the upper section of his oven box, which arrangement is the antithesis of applicants required and claimed structure.

The Vegh reference in no way suggests that a steamer such as Sato could operate with an air vent at the bottom of Sato's steamer. Vegh does

not even vent air, anywhere, in order to establish a circulating airflow, especially not by way of the chimney effect. It is not seen where the Vegh reference contributes anything to Sato such as might be anticipatory of applicant's invention.

In regard to Martinez, this reference does not disclose a convection oven, but rather a forced air oven which utilizes a fan to induce heat circulation in his oven. See col. 4 lines 53-57, to wit *"Referring still to FIGS. 2 and 3, heat circulation within the oven compartments 12 and 14 is induced by an exhaust assembly which comprises the previously mentioned exhaust ports 52, a fan 74, and exhaust plenum 72, and exhaust manifold 75."* Applicant's chimney effect is not part of Martinez's scheme which is understandable. Martinez is concerned with large institutional ovens wherein large airflows are required and which thus requires a fan to assist in getting such airflows.

A major problem for a purely convection oven such as applicants is to get proper circulation without using a fan since the use of a fan actually results in a directed air flow toward the exhaust system. This reduces the opportunity for the HTA to circulate all the way to the top portion of oven, and such is partly explained by Martinez in his use of deflector panels 66 as discussed at his col. 4, lines 20-31, to wit *"No disperser fin is situated on the narrow side of the horizontal panel 66 closest to and parallel with the oven compartments 12 and 14 door openings (not separately numbered). Instead, a vertical panel 70 extends perpendicularly and downward from the front narrow side of the horizontal panel 66 to rest on the oven compartment floor 60. The vertical panel 70 serves, not only to support the heat disperser 64, but to prevent heat from vent 58 from tending to travel directly into the*

exhaust port 52 rather than upward to circulate throughout the oven compartment 12 and 14 before exiting through the exhaust port 52."

It is particularly noted that the rejections ascribe more imagination to persons skilled in the art than one should expect. For example, the rejection on page 5 states that "It would have been obvious to one having ordinary skill in the art at the time the invention was made to position the air flow outlet means of Sato in the manner as taught by wither Vegh or Martinez in order to force HTA to travel a longer residence path within the oven cavity prior to discharge of the HTA therefrom."

However, there is no suggestion in any of the cited art that a steamer such as Sato's could even tolerate a circulating hot air or steam path. In this regard, the sensing unit 7 of Sato, when referenced to his sophisticated control circuit, most likely would not function properly or at least would require considerable research and development to make it work in a circulating steam flow since the change of state of steam to water is infinitely more problematic in constancy and certainty than such change is in a substantially linear flow system such as appears to be the case with Sato. With a circulating steam flow, the steam would not likely reach the top food container of his steamer before it would condense out of the stream.

The rejection of claims 5 and 6 under 35 U.S.C. 103(a) over Sato, Vegh or Martinez, and Johansson is respectfully traversed for the reasons given above in regard to the first three of these references, and further that Johansson's teachings of a metal piece heat sink does not contribute teachings to the said three references which would establish anticipation of applicant's claimed invention.

The rejection of claims 7 and 9 under 35 U.S.C. 103(a) over Sato, Vegh or Martinez, in view of Sham is respectfully traversed for the reasons

given above re claim 1, and further that the fundamental structure of applicant's invention as recited in amended claim 1 is present in the claims dependant therefrom. Thus the Sham reference does not contribute anticipatory teaching which bear on patentability of the dependent claims. In view of the present amendments and remarks, reconsideration and allowance of the rejected claims 1-3, 5-7 and 10 is respectfully requested.

The allowance of claims 11-20 is noted.

Respectfully Submitted
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Attorney of Record